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DATE MAILED: 12/23/2008

## NOTICE OF ALLOWANCE AND FEE(S) DUE

53080 7590 1223/2008 MCDERMOTT WILL & EMERY LLP 600 13TH STREET, NW WASHINGTON, DC 20005-3096 EXAMINER

PARSONS, THOMAS II

ART UNIT PAPER NUMBER

1795

| APPLICATION NO.                          | FILING DATE                          | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |  |
|--|--------------------------------------|----------------------|---------------------|------------------|--|--|
| 10/589,464                               | 10/589,464 08/14/2006 Kazuhiro Sugie |                      | 043888-0501         | 7177             |  |  |
| TITLE OF INVENTION, LEAD STORAGE BATTERY |                                      |                      |                     |                  |  |  |

 APPLN. TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEE(s) DUE
 DATE DUE

 nonprovisional
 NO
 \$1510
 \$300
 \$0
 \$1810
 03/23/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

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B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

## PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

| INSTRUCTIONS: This<br>appropriate. All further<br>indicated unless correcte<br>maintenance fee notificat  | form should be used f<br>correspondence includir<br>d below or directed oth<br>ions.  | or tran<br>g the l<br>erwise               | smitting the ISSU<br>Patent, advance or<br>in Block 1, by (a  |  |   |  |   |  | nould be completed where<br>correspondence address as<br>rate "FEE ADDRESS" for  |
|---|---|--|---|--|---|--|---|--|--|
| CURRENT CORRESPONDENCE ADDRESS (Note: Use Block I for any change of address)  |   |  |   | Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.  |   |  |   |  |  |
| 600 13TH STRE   | 7590 1223<br>F WILL & EMER<br>ET, NW<br>, DC 20005-3096   |  | .P  |  |   | Cer  | tificate                                      | of Mailing or Trans  |  |
|   |   |  |   |  |   |  |   |  | (Depositor's name)   |
|   |   |  |   |  |   |  |   |  | (Signature)  |
|   |   |  |   |  | L   |  |   |  | (Date)   |
| APPLICATION NO.   | FILING DATE   |  |   | FIRST NAMED INVEN  | TOR   | :  | ATTO  | RNEY DOCKET NO.  | CONFIRMATION NO.   |
| 10/589,464  | 08/14/2006  |  |   | Kazuhiro Sugie   |   |  |   | 043888-0501  | 7177   |
| TITLE OF INVENTION:   | LEAD STORAGE BA   | PTERY                                      |   |  |   |  |   |  |  |
| APPLN, TYPE   | SMALL ENTITY  | IS:  | SUE FEE DUE   | PUBLICATION FEE I  | UE  | PREV. PAID ISSU  | FEE   | TOTAL FEE(S) DUE   | DATE DUE   |
| nonprovisional  | NO  |  | \$1510  | \$300  |   | \$0  |   | \$1810   | 03/23/2009   |
| EXAM  | INER  |  | ART UNIT  | CLASS-SUBCLASS   | S   | 1  |   |  |  |
| PARSONS, THOMAS H   |   |  | 1795  | 429-213000   |   | ,  |   |  |  |
| "Fee Address" indi<br>PTO/SB/47; Rev 03-0;<br>Number is required.  3. ASSIGNEE NAME AT  | ondence address (or Cha<br>1/122) attached.<br>cation (or "Fee Address<br>2 or more recent) attach<br>ND RESIDENCE DAT/<br>ess an assignee is ident<br>in 37 CFR 3.11. Comp | nge of ' 'Indica ed. Use                   | Correspondence  ution form  of a Customer  E PRINTED ON T   | (I) the names of to agents OR, alter (2) the name of a registered attorney 2 registered patent listed, no name with the PATENT (print of the patent).  | ap to<br>rnati<br>singl<br>or atto<br>II be<br>or typ<br>he p | le firm (having as a<br>agent) and the nam<br>mays or agents. If<br>printed.<br>pe)<br>satent. If an assign<br>assignment. | memb<br>es of u<br>no nan                     | er a 2p to be is 3   | ocument has been filed for   |
| Please check the appropri   | ate assignee category or  | catego                                     | ries (will not be pr  | inted on the patent):  |   | Individual 🗖 Co  | orporati                                      | ion or other private gro   | up entity Government   |
| Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies  |   |  | ed)   | h. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)   A check is enclosed.   Payment by credit card. Form PTO-2038 is attached.   The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form). |   |  |   |  |  |
|   | SMALL ENTITY state  | s. See                                     | 37 CFR 1.27.  |  |   |  |   | ITTY status. See 37 CF   |  |
| interest as shown by the r  | ecords of the United Sta  | tes Pate                                   | ent and Trademark   | Office.  | nan t   | ne appucant; a regi  | sterea :                                      | attorney or agent; or th   | e assignee or other party in   |
| Authorized Signature  |   |  |   |  |   | Date   |   |  |  |
| Typed or printed name   |   |  |   |  | Registration N  |  |   |  |  |
| This collection of informs<br>an application. Confident<br>submitting the completed<br>this form and/or suggestic<br>Box 1450, Alexandria, V.<br>Alexandria, Virginia 223 | ation is required by 37 C<br>iality is governed by 35<br>application form to the<br>ons for reducing this bu-<br>inginia 22313-1450. DC<br>13-1450.                         | FR 1.3<br>U.S.C.<br>USPT<br>den, st<br>NOT | 11. The informatic<br>122 and 37 CFR<br>O. Time will vary<br>lould be sent to the<br>SEND FEES OR O | on is required to obtain<br>1.14. This collection in<br>depending upon the<br>e Chief Information C<br>COMPLETED FORM  | n or i<br>is est<br>indiv<br>Office<br>IS To                  | retain a benefit by t<br>timated to take 12 i<br>vidual case. Any co<br>er, U.S. Patent and<br>O THIS ADDRESS              | he pub<br>minute:<br>mmen<br>Trader<br>i. SEN | lic which is to file (and<br>is to complete, includin<br>is on the amount of tir<br>nark Office, U.S. Depa<br>D TO: Commissioner I | by the USPTO to process)<br>g gathering, preparing, and<br>ne you require to complete<br>utment of Commerce, P.O.<br>for Patents, P.O. Box 1450, |

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# UNITED STATES PATENT AND TRADEMARK OFFICE

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| APPLICATION NO. FILING DATE |                 | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------|-----------------|----------------------|---------------------|------------------|
| 10/589,464                  | 08/14/2006      | Kazuhiro Sugie       | 043888-0501         | 7177             |
| 53080 75                    | 90 12/23/2008   |                      | EXAM                | IINER            |
| MCDERMOTT                   | WILL & EMERY LI | PARSONS, THOMAS H    |                     |                  |
| 600 13TH STREE              |                 | ART UNIT             | PAPER NUMBER        |                  |
| WASHINGTON, I               | OC 20005-3096   | 1705                 |                     |                  |

DATE MAILED: 12/23/2008

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 290 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 290 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

| Application No.  | Applicant(s) |  |
|------------------|--------------|--|
| 10/589,464       | SUGIE ET AL. |  |
| Examiner         | Art Unit     |  |
| THOMAS H DARSONS | 1705         |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable. PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative

- of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.
- 1. This communication is responsive to the Amendment filed 30 October 2008.
- 2. The allowed claim(s) is/are 1-4.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - b) \( \subseteq \text{Some\* c) \subseteq \text{None of the:}
    - 1. T Certified copies of the priority documents have been received.
    - 2. Certified copies of the priority documents have been received in Application No.
    - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) hereto or 2) to Paper No./Mail Date
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. 

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

# Attachment(s)

- 1. | Notice of References Cited (PTO-892)
- Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date 10/30/2008
- 4. T Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. 

  Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other

Application/Control Number: 10/589,464

Art Unit: 1795

# REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

The primary reason for the allowance of the invention of claim 1 is the recitation "said negative electrode active material layer includes 0.0001 to 0.003 wt% of Sb, and includes 0.01 to 2 wt% of condensate of bisphenol and aminobenzene sulfonic acid derivative."

JP2003-346888 discloses a lead storage battery comprising a negative electrode active material layer including 0.0001 to 0.003 wt% of Sb. JP 2003-346888 does not disclose that the active material layer includes 0.01 to 2 wt% of condensate of bisphenol and aminobenzene sulfonic acid derivative.

JP 11-250913 discloses a lead storage battery comprising a negative electrode active material layer including 0.01 to 2 wt % (0.5-.75 wt%) of condensate of bisphenol and aminobenzene sulfonic acid derivative. JP11-250913 does not disclose that the active material layer including 0.0001 to 0.003 wt% of Sb

The Applicants, in Table 1, have proved comparative data between a battery wherein the negative electrode active material layer includes the claimed Sb, but not including the claimed condensate, a battery wherein the negative electrode active material layer includes the claimed condensate, but not including the claimed Sb, and a battery wherein the negative electrode active material layer includes both the claimed Sb and condensate. The comparative data shows that the battery wherein the negative electrode active material layer includes both the claimed Sb and condensate provides superior results that would not have been expected by a person having ordinary skill in the art at the time the invention was made.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the negative electrode active material of JP2003-346888 by incorporating the condensate of JP 11-250913 to arrive at the claimed combination.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

# Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS H. PARSONS whose telephone number is (571)272-1290. The examiner can normally be reached on M-F (7:00-3:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Art Unit: 1795

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PATRICK RYAN/ Supervisory Patent Examiner, Art Unit 1795 Thomas H Parsons Examiner Art Unit 1795

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